

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (Currently amended): A method comprising:
 obtaining a white point correction for a display device;
 obtaining a chromatic correction for the display device; and
 generating in a device-independent color space adjusted device-independent color coordinates for the display device based on measured device-independent coordinates associated with a hard copy in the device-independent color space, the white point correction and the chromatic corrections, wherein the adjusted device-independent color coordinates for the display device compensate for a visual mismatch between imagery presented by the display device using the measured device-independent color coordinates relative to the same imagery presented by the hard copy using the measured device-independent color coordinates in the same illuminant conditions.

Claim 2 (Original): The method of claim 1, further comprising:
 obtaining the white point correction by determining a white point correction matrix;
and
 obtaining the chromatic correction by determining a chromatic correction matrix.

Claim 3 (Original): The method of claim 2, wherein determining a white point correction matrix comprises:
 displaying a color on a display device, the color being defined by an original white point matrix in a D50 illuminant condition; and
 adjusting at least some white point matrix values so that visual appearance on the display device is visually equivalent to a print.

Claim 4 (Original): The method of claim 3, wherein adjusting at least some white point matrix values comprises adjusting maximum phosphor settings on a display.

Claim 5 (Original): The method of claim 2, wherein determining a chromatic correction matrix comprises:

displaying a color on a display device, the color being defined by an original chromatic matrix in a D50 illuminant condition; and

adjusting at least some chromatic matrix values so that visual appearance on the display device is visually equivalent to a print.

Claim 6 (Original): The method of claim 5, wherein adjusting at least some chromatic matrix values comprises adjusting chromaticity values in an RGB color space.

Claim 7 (Previously Presented): The method of claim 6, wherein adjusting chromaticity values in an RGB color space comprises adjusting chromaticity values in an AdobeRGB(D50) color space.

Claim 8 (Previously Presented): The method of claim 1, wherein generating adjusted color coordinates based on the white point and chromatic corrections comprises generating a single correction matrix that includes both the white point and chromatic corrections.

Claim 9 (Currently amended): A method comprising:

determining device-independent coordinates in a device-independent color space defining a color on a hard copy; and

generating adjusted device-independent coordinates in the device-independent color space for a display device using the determined device-independent coordinates in the device-independent color space, a white point correction and a chromatic correction, wherein the adjusted device-independent color coordinates for the display device compensate for a visual mismatch between imagery presented by the display device using the determined device-independent coordinates of the hard copy relative to the same imagery presented by the hard copy using the determined device-independent coordinates in the same illuminant conditions.

Claim 10 (Original): The method of claim 9, further comprising displaying the color using the corrected coordinates.

Claim 11 (Original): The method of claim 10, wherein the displayed color is visually equivalent to the color on the hard copy.

Claim 12 (Original): The method of claim 9, wherein the white point correction is a white point correction matrix and the chromatic correction is a chromatic correction matrix.

Claim 13 (Original): The method of claim 12, further comprising determining the white point correction matrix and the chromatic correction matrix.

Claim 14 (Original): The method of claim 13, wherein determining the white point correction matrix comprises:

- displaying a color on a display device, the color being defined by an original white point matrix in a D50 illuminant condition; and

- adjusting at least some white point matrix values so that visual appearance on the display device is visually equivalent to a white printout viewed in the D50 illuminant condition.

Claim 15 (Original): The method of claim 13, wherein determining the chromatic correction matrix comprises:

- displaying a color on a display device, the color being defined by an original chromatic matrix in a D50 illuminant condition; and

- adjusting at least some chromatic matrix values so that visual appearance on the display device is visually equivalent to a color printout viewed in the D50 illuminant condition.

Claim 16-29 (Canceled).

Claim 30 (Currently amended): A system comprising:

- a display device;

- a memory device; and

- a processor coupled to the memory device and the display, wherein the processor:

obtains a white point correction for the display device from the memory device;
obtains a chromatic correction for the display device from the memory device;
and
generates in a device-independent color space adjusted device-independent color coordinates for the display device based on measured device-independent coordinates associated with a hard copy in the device-independent color space, the white point correction and the chromatic corrections, wherein the adjusted device-independent color coordinates for the display device compensate for a visual mismatch between imagery presented by the display device using the measured device-independent color coordinates relative to the same imagery presented by the hard copy using the measured device-independent color coordinates in the same illuminant conditions.

Claims 31-36 (Canceled)

Claim 37 (Currently amended): A computer readable medium carrying program code that when executed:

receives a white point correction for a display device as input;
receives a chromatic correction for the display device as input; and
generates in a device-independent color space adjusted device-independent color coordinates for the display device based on measured device-independent coordinates associated with a hard copy in the device-independent color space, the white point correction and the chromatic corrections, wherein the adjusted device-independent color coordinates for the display device compensate for a visual mismatch between imagery presented by the display device using the measured device-independent color coordinates relative to the same imagery presented by the hard copy using the measured device-independent color coordinates in the same illuminant conditions.

Claims 38- 42 (Canceled).

Claim 43 (Currently amended): A computer readable medium comprising a color profile data structure thereon, the color profile data structure corresponding to a display device and including adjusted device-independent illuminant condition values that do not correspond to actual device-independent illuminant conditions associated with the display device, such that colors rendered on the display device using the color profile data structure are visually equivalent to colors rendered on a printing device, wherein the adjusted device-independent illuminant condition values correct for a visual mismatch between a hard copy and imagery presented by the display device using measured device-independent color coordinates of the hard copy in the same illuminant conditions.

Claim 44 (Currently amended): A method for correcting output of a display device when images rendered by the display device have measured device-independent color coordinates that are the same as measured device-independent coordinates for the images rendered on a hard copy in the same illuminant conditions yet the images rendered by the display device look visually different than the images rendered on the hard copy, the method comprising:

- obtaining a white point correction for a display device;
- obtaining a chromatic correction for the display device; and
- generating in a device-independent color space adjusted device-independent color coordinates for the display device based on non-adjusted device-independent coordinates associated with the hard copy, the white point correction and the chromatic corrections, wherein the adjusted device-independent color coordinates adjust for the fact that images rendered by the display device having measured device-independent color coordinates that are the same as measured device-independent coordinates for images rendered on the hard copy in the same illuminant conditions look visually different than images rendered on the hard copy, and wherein images rendered by the display device using the adjusted device-independent color coordinates are substantially visually equivalent to images rendered on the hard copy using the non-adjusted device-independent coordinates.

Claim 45 (New): A method of correcting for inaccuracies in a Commission Internationale de l'Eclairage (CIE) standard comprising:

- obtaining a white point correction for a display device;
- obtaining a chromatic correction for the display device; and

generating in a device-independent color space adjusted device-independent color coordinates for the display device based on device-independent coordinates associated with a hard copy in the device-independent color space, the white point correction and the chromatic corrections, wherein the adjusted device-independent color coordinates correct for the accuracies in the CIE standard.